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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/716,573	11/17/2000	Kil Yong Sung	00-11-1450	8934

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EXAMINER

COCKS, JOSIAH C

ART UNIT	PAPER NUMBER
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3749

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/716,573

Applicant(s)

SUNG, KIL YONG

Examiner

Josiah C. Cocks

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Applicant's Response*

1. Receipt of applicant's response filed 9/24/03 is acknowledged. The examiner maintains the rejections to claims 16, 17, and 19 based on the *Tasi* reference and the rejections to claim 18 based on the *Tasi* reference in view of the *Bruhn* reference (recited again below). Additionally the examiner maintains the rejections to claims 18 and 19 based on the *Huang* reference (recited again below). Further, the examiner notes that the *Huang* reference was not applied to claims 16 and 17 in the prior reference. However, after further review the examiner considers that claims 16 and 17 read on the disclosure of *Huang* and a rejection has been applied below. Applicant's arguments contained in the response have been addressed in the Response to Arguments section (item 8).

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application

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being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by *Tasi* (US # 5,531,592).

*Tasi* discloses in Figures 1-3 a lighter substantially as described including a lighter housing (1 and 5), a fuel tank (see Fig. 1) located within the housing, a piezoelectric unit (21) for creating a spark, a trigger (22) slidably mounted in the lighter housing for activating the piezoelectric unit, the trigger having a stopper tab/flange (221), a fuel-release valve urged into a closed position, a spring mechanism (34 and 35) having a non-operational position, an operational position, a first portion (top end of 34), and a second portion (bottom end of 34), wherein the first portion locks the trigger when the spring mechanism is in the non-operational position, and the second portion opens the fuel-release valve when the spring mechanism is in the operational position (see col. 2, lines 19-44), and a safety button (36) moving the spring mechanism from the non-operational position to the operational position.

4. Claims 16-19 are rejected under 35 U.S.C. 102(e) as being anticipated by *Huang* (US # 6,050,810).

*Huang* discloses in Figures 1-4 a lighter substantially as described in applicant's claims 16-19 including a lighter housing, a fuel tank, a piezoelectric unit, a trigger; slidably mounted, having a stopper tab, and moving along a first axis, a fuel release

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valve/plug (31) being spring loaded (32) and capable of movement along a second axis parallel to the first axis, a spring mechanism (62, 64, 50, and 70) having a non-operational position, an operational position, a first portion (70) and a second portion (50), wherein the first portion (70) locks the trigger when the spring mechanism is in the non-operational position (see Fig. 2), and the second portion (50) opens the valve/plug when the spring mechanism is in the operational position (see Fig. 4), and a safety button/knob (60) for moving the spring mechanism from the non-operational position to the operational position wherein the safety button/knob rotationally moves the spring mechanism (see pivotal movement of latch (70) by extension (64)).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Alternatively, Claim 19 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over *Tasi* (US # 5,531,592) as applied in item 2 above.

In regard to the limitation of claim 19 regarding a safety button for rotationally moving the spring mechanism, applicant asserts that claim 19 is not materially distinct from the scope of claim 17 because rotational motion is inherent in the movement of a spring (see page 12 of applicant's response filed 5/8/02 (paper # 5)). Further, the

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examiner notes that, broadly interpreted, a characterization of “rotationally moving” is accurately applied to the movement of the spring mechanism (35 and 34) of *Tasi*. When safety button (36) is slid downwardly a portion engages the spring (35). This spring then compresses, and portions of the spring engage in rotational movement to translate the force applied to the spring by the safety button (36) to the lower head portion of rod (34) in order to engage the fuel release valve of the fuel source. When the safety button is released the spring (35) functions to urge the safety button back into a non-operational position. Therefore, claim 19 is rejected under *Tasi* as applied to claim 17 above as the spring mechanism of *Tasi* (items 34 and 35) would inherently include rotational motion.

7. Alternatively, claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Tasi*, as applied to claim 16 above, and further in view of *Bruhn* (US # 4,610,624).

*Tasi* discloses all the limitations of claim 18 except that the fuel release valve is capable of movement on an axis parallel to the axis of movement of the trigger.

*Bruhn* teaches a lighter in the same field of endeavor as *Tasi* wherein the lighter of *Bruhn* has a trigger (11) and valve (7) arranged such that the trigger moves along a first axis that is parallel to the movement of the valve along a second axis.

Therefore, in regard to claim 18, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the lighter of *Tasi* to incorporate the trigger and valve arrangement for parallel movement as taught by *Bruhn* as it is well known in the art that lighter may take varied shapes (see *Bruhn*, col. 1, lines 9-10) such as having an elongated housing and elongated nozzle with the trigger axis and valve axis are parallel. This lighter shape, trigger arrangement, and valve arrangement

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allow a user to ignite a cooker, grill or open fire while maintaining the user's hand a safe distance from the flame (see *Bruhn*, col. 1, lines 40-44 and 61-64) and this shape ensures easy, rapid operation and an esthetic appearance (see *Bruhn*, col. 2, lines 14-22).

### ***Response to Arguments***

8. Applicant's arguments filed 9/24/03 have been fully considered but they are not persuasive.

Applicant argues on page 3 of the response that applicant's invention and that of *Tasi* are operate completely differently because applicant's invention discloses that the flame only burns so long as the safety button is depressed whereas *Tasi* discloses that once a flame is ignited, it will continue to burn even when the safety button is released. However, even assuming that this contention is correct, as has been noted in the rejections applied in items 3, 6, and 7, the examiner does not consider there to be any recited structural differences in applicant's claims that read over the *Tasi* or *Tasi* in view of the *Bruhn*.

Applicant also argues on page 5 of the response that the combination of *Tasi* and *Bruhn* does not reach all the limitations of claim 18. However, as noted in item 7 above, the examiner considers that *Tasi* teaches all the limitations of claim 18 except for limitations relating to parallel movement of the fuel release valve and trigger. The missing limitations are considered to be taught by *Bruhn* and the two references properly combinable for the reasons noted in item 7 above.

Applicant also argues on page 6 of the response that the torsion generated by the spring of the *Tasi* disclosure is different than that generated by the rotational movement



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of applicant's invention. However, as noted in item 6 above, the examiner considers that the movement of the spring of *Tasi*, broadly interpreted, meets the "rotationally moving" limitation of applicant's claims.

Applicant also argues on page 4 and pages 7-8 of the response that an interference should be declared to determine the issue of whether applicant's claims are anticipated by *Huang*. The reasons why the examiner believes the declaration of an interference is improper are recited in the following **Interference** section.

### *Interference*

9. Claims 16-19 of this application have been asserted by applicant to correspond to claims 1 and 6 of U. S. Patent No. 6,050,810. These claims are not patentable to the applicant because, as noted in section 2 above, the claims are anticipated by *Tasi* or rendered obvious by *Tasi* in view of *Bruhn*, and are anticipated by *Huang*.

An interference cannot be initiated since a prerequisite for interference under 37 CFR 1.606 is that the claim be patentable to the applicant subject to a judgment in the interference.

10. Claims 16-19 of this application are asserted by applicant to correspond to claims 1 and 6 of U.S. Patent No. 6,050,810 to *Huang* (hereinafter "*Huang*").

The examiner does not consider these claims to be directed to the same invention as that of *Huang* because the claimed lighter of *Huang* is both structurally and functionally distinct from applicant's lighter. While applicant's claims read on the

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disclosure of *Huang*, the claims of *Huang* are claiming a distinct lighter than that claimed by applicant.

Applicant's "edge" and *Huang*'s "hook" are distinct structures.

*Huang* claims a lighter having a latch (see *Huang* item 70) pivotally secured in a lighter housing which functions to engage a trigger to prevent the trigger from being actuated (see *Huang*, Fig. 1) wherein the latch has a distinct structure in the form of hook (see *Huang*, item 731) to engage the trigger. Applicant claims a spring mechanism (see applicant's item 60) having a first portion in the form of a cam-lever edge for locking a trigger of a lighter (see applicant's item 81) and a second portion (see applicant's item 70) for opening a fuel-release valve. However, applicant does not claim, disclose, or suggest a hook associated with any portion of the spring mechanism. The trigger locking latch of *Huang* and the trigger locking mechanism of applicant function in a distinct manner from one another. *Huang*'s hook (see *Huang*, item 731) is positioned to allow latch (see *Huang*, item 70) to lock the trigger such that the latch is placed in **tension** to prevent trigger movement (see *Huang*, Fig. 2) while applicant's edge (see applicant's item 81) engages the trigger (see applicant's Fig. 1 showing first portion 80 engaging stopper portion 110 mounted on the trigger) such that the first portion is placed in **compression**. Therefore, the hook structure of *Huang* is critical to his claimed means of preventing trigger actuation, whereas a person of ordinary skill in the art would not be prompted to include such a hook in any portion of applicant's trigger locking mechanism.

Applicant's arguments on pages 7-8 of the response filed 9/24/03 that it would be obvious to one skilled in the art to interchange applicant's cam-lever edge and *Huang*'s hook are not persuasive. There is no proper motivation for this proposed substitution.

Huang is claiming direct engagement of the knob (60) with the plug (31) and latch (70).

*Huang* claims in claims 1 and 6 that a plug (see *Huang*, item 31) engaging a valve seat (see *Huang*, item 38) and a knob (see *Huang*, item 60) wherein the knob is slidably received in a housing and both engages the plug for disengaging the plug from the valve seat to release a gas flow and engages the latch (see *Huang*, item 70) for releasing the hook to allow trigger movement. The examiner regards this language in *Huang* to recite direct engagement of the knob (31) with the plug (31) and the latch (70).

While applicant also claims a knob/safety button (see applicant's item 120) and plug/valve (see applicant's item 31), applicant's knob/safety button only engages the spring mechanism to move the spring mechanism into an operational and non-operational position whereby the second portion (see applicant's item 70) of the spring mechanism opens the fuel release valve and does not claim or disclose that the knob/safety button engages the plug/valve.

Applicant's arguments on page 8 of the response filed 9/24/03 that, applicant's it would be obvious to one skilled in the art to interchange the direct engagement means of the valve/plug disclosed in *Huang* with the engagement means of the spring mechanism disclosed by applicant, is not persuasive. There is no proper motivation for this proposed substitution.

Therefore, *Huang's* claimed means for releasing the trigger and allowing a gas flow are both structurally and functionally distinct from that claimed by applicant. Accordingly, an interference cannot be initiated based upon these claims.

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***Terminal Disclaimer***

11. The terminal disclaimer filed on 5/8/02 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US # 6,186,773 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Conclusion***


12. This Office Action is made Non-Final because of the new application of the *Huang* reference to claims 16 and 17.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Josiah Cocks whose telephone number is (703) 305-0450. The examiner can normally be reached on weekdays from 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus, can be reached at (703) 308-1935. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

jcc  
November 26, 2003

  
JOSIAH COCKS  
PATENT EXAMINER  
ART UNIT 3749